

**AMENDMENTS TO THE CLAIMS**

**Listing of Claims:**

Claim 1 (original) A composition for the prevention or control of coccidiosis comprising viable wild type sporulated oocysts of at least one species of protozoa known to cause coccidiosis, wherein said composition is sterile and contains at least about 10,000 oocysts per milliliter and less than about 0.8% by weight of alkali metal dichromate.

Claim 2 (original) A composition as set forth in claim 1 wherein the composition contains less than about 0.6% by weight of alkali metal dichromate.

Claim 3 (original) A composition as set forth in claim 2 wherein the composition contains less than about 0.4% by weight of alkali metal dichromate.

Claim 4 (original) A composition as set forth in claim 3 wherein the composition contains less than about 0.2% by weight of alkali metal dichromate.

Claim 5 (original) A composition as set forth in claim 4 wherein the composition contains less than about 0.1% by weight of alkali metal dichromate.

Claim 6 (currently amended) A composition as set forth in claim 1 wherein said composition is ~~characterized as~~ substantially free of alkali metal dichromate.

Claim 7 (original) A composition as set forth in claim 1 wherein said composition contains less than about 0.3% by weight of dichromate ion.

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Claim 8 (original) A composition as set forth in claim 7 wherein said composition contains less than about 0.15% by weight of hexavalent chromium.

Claim 9 (original) A composition for the prevention or control of coccidiosis comprising viable wild type sporulated oocysts of at least one species of protozoa known to cause coccidiosis, wherein said composition is sterile and contains at least about 300 oocysts per milliliter and less than about 0.002% by weight of alkali metal dichromate.

Claim 10 (original) A composition for the prevention or control of coccidiosis comprising viable wild type sporulated oocysts of at least one species of protozoa known to cause coccidiosis, wherein said composition is sterile and contains less than about  $5.0 \times 10^{-3}$   $\mu\text{g}$  of alkali metal dichromate per oocyst.

Claim 11 (original) A composition as set forth in claim 10 wherein said composition is sterile and contains less than about  $3.8 \times 10^{-3}$   $\mu\text{g}$  of alkali metal dichromate per oocyst.

Claim 12 (original) composition as set forth in of claim 11 wherein said composition is sterile and contains less than about  $1.3 \times 10^{-3}$   $\mu\text{g}$  of alkali metal dichromate per oocyst.

Claim 13 (original) A composition as set forth in of claim 12 wherein said composition is sterile and contains less than about  $6.3 \times 10^{-5}$   $\mu\text{g}$  of alkali metal dichromate per oocyst.

Claim 14 (original) A composition as set forth in claim 1, further comprising a diluent.

Claim 15 (original) A composition as set forth in claim 14, wherein the diluent comprises water.

Claim 16 (original) A composition as set forth in claim 15, wherein the aqueous diluent comprises 0.5X phosphate buffered saline.

Claim 17 (original) A composition as set forth in claim 16 further comprising a buffer.

Claim 18 (original) A composition as set forth in claim 17, wherein said buffer is selected from the group consisting of phosphate buffer, bicarbonate buffer, citric acid and tris buffers.

Claim 19 (currently amended) A composition as set forth in claim 17, wherein said buffer controls pH between about 7.0 and about 7.8.

Claim 20 (original) A composition as set forth in claim 14, further comprising a bactericide.

Claim 21 (original) A composition as set forth in claim 20, wherein said bactericide is selected from the group consisting of potassium perchlorate, sodium hypochlorite, hydrochlorous acid, sodium hydroxide and antibiotics.

Claim 22 (original) A composition as set forth in of claim 21, wherein said composition contains from about 0.1 to about 0.75 wt% potassium perchlorate, and/or from about 0.001 to about 0.01 wt% sodium hypochlorite, and/or from about 1 to about 5 ppm hydrochlorous acid, and/or from about 0.5 to about 1.5 mM sodium hydroxide and/or from about 20 to about 30 µg/ml gentamicin, in the final composition.

Claim 23 (original) A composition as set forth in claim 14, further comprising a composition that ameliorates a decline in post-challenge performance.

Claim 24 (original) A composition as set forth in claim 23, wherein said composition is selected from the group consisting of Alum, Freund's adjuvant, calcium phosphate, beryllium hydroxide, dimethyl dioctadecyl ammonium bromide, saponins, polyanions, Quil A, inulin, lipopolysaccharide endotoxins, liposomes, lysolecithins, zymosan, propionibacteria, mycobacteria, interleukin-1, interleukin-2, interleukin-4, interleukin-6, interleukin-12, interferon- $\alpha$ , interferon- $\gamma$ , and granulocyte-colony stimulating factor.

Claim 25 (original) A composition as set forth in claim 23, wherein said composition is selected from the group consisting of cytokines, growth factors, chemokines, mitogens and adjuvants.

Claim 26 (original) A composition as set forth in claim 25, wherein said composition comprises *Propionibacterium acnes*.

Claim 27 (original) A composition as set forth in claim 26, wherein said composition contains at least about 3.0 milligrams (dry weight) of *P. acnes* per milliliter.

Claim 28 (original) A composition as set forth in claim 26, wherein said composition contains at least about 30 milligrams (dry weight) of *P. acnes* per milliliter.

Claim 29 (original) A composition as set forth in claim 1 comprising:  
viable sporulated oocysts of at least one species of protozoa known to cause coccidiosis,

a diluent,  
a buffer, and  
a bactericide,

wherein said composition contains about 10,000 oocysts per milliliter and less than about 0.8% weight to volume of alkali metal dichromate.

Claim 30 (original) A composition as set forth in claim 29, further comprising a composition that ameliorates a decline in post-challenge performance.

Claims 31-112 cancelled.

Claim 113 (currently amended) A kit for the prevention or control of coccidiosis comprising,

a composition containing, sterile, viable, wild type sporulated oocysts of at least one species of protozoa known to cause coccidiosis, said composition containing less than about 0.8% by weight of alkali metal dichromate; and

instructions for administration of said composition to an animal.

Claim 114 (original) A kit as set forth in claim 113 containing less than about 0.3% by weight of dichromate ion.

Claim 115 (original) A kit as set forth in claim 113 containing less than about 0.15% by weight of hexavalent chromium.

Claim 116 (currently amended) A kit as set forth in claim 113 wherein said composition characterized as is substantially free of alkali metal dichromate.

Claim 117 (original) A kit as set forth in claim of 113, wherein said composition comprises the composition of claim 1.

Claim 118 (currently amended) A kit as set forth in claim 113, further comprising:  
a diluent, wherein said diluent ~~characterized as is~~ substantially free of alkali metal dichromate; and  
instructions for mixing said diluent with said composition to form a mixture.

Claim 119 (original) A kit according to claim 118, wherein said diluent comprises a sterile diluent.

Claims 120-135 cancelled.

Claim 136 (currently amended) A composition for the prevention or control of coccidiosis comprising viable wild type sporulated oocysts of at least one species of protozoa known to cause coccidiosis, said composition having been made by: ~~the method of claim 56;~~  
introducing into an aqueous sporulation medium oocysts of at least one species of protozoa known to cause coccidiosis;  
incubating said oocysts in said aqueous sporulation medium, thereby causing sporulation of oocysts; and  
introducing an oxidizing agent into said medium at a rate sufficient to maintain the average dissolved oxygen content during sporulation at at least 30%;  
wherein said composition is ~~characterized as~~ substantially free of alkali metal dichromate.

Claim 137 (original) A composition as set forth in claim 136 wherein said composition comprises viable wild type sporulated oocysts from a species of *Eimeria*

selected from the group consisting of *Eimeria acervulina*, *Eimeria maxima*, and *Eimeria tenella*.

Claim 138 (original) A composition as set forth in claim 137 wherein said composition comprises viable wild type sporulated oocysts of *Eimeria acervulina*, *Eimeria maxima*, and *Eimeria tenella*.

Claim 139 (currently amended) A composition as set forth in claim 137 wherein said ~~vaccine composition~~ comprises viable wild type sporulated oocysts of *Eimeria acervulina*, *Eimeria maxima*, and *Eimeria tenella* in a ratio defined by the minimum immunizing dose and amount determined by storage half-life determinations.

Claim 140 (currently amended) A composition as set forth in claim 137 wherein said composition ~~comprising comprises~~ at least about  $1.25 \times 10^4$  viable wild type sporulated oocysts per milliliter.

Claim 141 (currently amended) The composition as set forth in claim 137 wherein said composition is characterized as substantially free of added bactericide.

Claim 142 (original) A composition as set forth in claim 137 comprising a composition which ameliorates a decrease in post-challenge performance.

Claim 143 (original) A composition as set forth in claim 142 wherein said composition comprises *Propionibacterium acnes*.

Claim 144 (new) A composition comprising:  
viable, sporulated oocysts of at least one species of coccidial protozoa; and  
an anti-foaming agent.

Claim 145 (new) A composition as set forth in claim 144 wherein said anti-foaming agent is Antifoam A.

Claim 146 (new) A composition for the prevention or control of coccidiosis comprising:

viable, sporulated oocysts of at least one species of protozoa known to cause coccidiosis;

wherein said oocysts have been separated by tangential flow filtration from an aqueous sporulation medium.

Claim 147 (new) A composition for the prevention or control of coccidiosis comprising:

viable, sporulated oocysts of at least one species of protozoa known to cause coccidiosis;

wherein said composition is sterile, and said oocysts have been separated by tangential flow filtration from an aqueous medium containing bacterial contaminants.

Claim 148 (new) A composition for the prevention and treatment of coccidiosis comprising:

a pharmaceutically acceptable carrier, diluent, or excipient; and

viable, wild type, sporulated oocysts of at least one species of protozoa known to cause coccidiosis;

wherein the sporulated oocysts are sterile, and said composition is substantially free of potassium dichromate.